

Kogic, crosswords Cquations, Color!


## IWTRODUCTION

Welcome to the first installment of SLA's fall issue
Here we have a collection of the most frightening, most bone rattling, head spinning puzzles for all your early fall pleasures.

Included in this issue, you will find:
1 color square
1 crossword puzzle
1 equation
1 logic puzzle
Plus a bonus of each by your fellow peers of SLA!
Remember, this magazine is not for the faint of heart. It will require your best deductive skills if you are to finish it, So beware and read if you dare!


## PVZZLES

## Multi step equation

$$
2 x+5 x+5-x+6=77
$$

## $x=$

## Logic puzzle

|  |  |  |  |  | and |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

1. Neither Bronwyn, Aidan, or Greg like scary things
2. Only Sarah and Aidan still like to celebrate halloween
3. Bronwyn's event starts first but Sarah's event is last
4 Aidan's event is after Ariana's but before Greg's
4. On the zzth, someone had to cancel plans in order to get their yard done
5. Both Bronwyn, Aidan, and Ariana went to the same farm on different days for different things, but not Greg or Sarah.
6. The Fall Festival always comes early in the season

## Color square

| $\mathbf{1 / A}$ | $\mathbf{B}$ | $\mathbf{C}$ | $\mathbf{D}$ |
| :--- | :--- | :--- | :--- |
| $\mathbf{2}$ |  |  |  |
| $\mathbf{3}$ |  |  |  |
| $\mathbf{4}$ |  |  |  |

Row \#1: Two blue, One Orange, One Green
Column C: Three Orange, One Purple
Row \#3: One Purple, Two Orange, One Green

Crossword


Word Bank
Fall - Spook - Foggy - Rake - Leaf - Gusty - Cozy

## perer puztes ind Justirichtion

## Multi step equation

$$
\begin{gathered}
x+3 / 4=x-9 \\
\text { Step 1: } \\
1 / 4 x+3 / 4 /=x+-9 \\
1 / 4 x+3 / 4=x-9 \\
\text { Step 2: } \\
1 / 4 x+3 / 4-x=x-9-x \\
-3 / 4^{x}+3 / 4=-9 \\
\text { Step 3: } \\
-3 / 4 x+3 / 4-3 / 4=-9-3 / 4 \\
-3 / 4 x=-39 / 4 \\
\text { Step } 4: \\
(4 /-3)^{*}(-3 / 4 x)=(4 /-3)^{*}(-39 / 4) \\
x=13
\end{gathered}
$$

## Logic puzzle



We know this because $5^{\prime} g$ and $5^{\prime} 4$ are the only ones who are higher than another by an inch. However, 5'g is already taken because we know the second tallest loves money and sings "Getting that Money". In that case, whoever wrote a diss track must be 5'4 This also means that Big L is 53 because he is an inch shorter than whoever drops warnings before diss tracks. At least this is what I originally thought before realizing that Eazy - E is already the shortest of the group as 53'3 is the shortest option. This means that neither 59-5'8 or $54^{\prime}-53^{\prime 3}$ is correct despite being the only heights taller by an inch.
Despite the last clue, that Biggie's biggest hit started with " $p$ " and ends in " $n$ " the logic puzzle itself does not give enough information to solve the entire puzzle, making it unsolvable.

## Color square

| V/A | B | C | D |
| :--- | :--- | :--- | :--- |
| Red | Red | Red | Yellow |
| Red | Blue | Blue | Yollow |
| $\mathbf{3}$ | Blue | Yellow | Yellow |
| B | Green | Green | Green |
| Green |  |  |  |

Column A: One Green, Two Red, One Blue
Column d: Three yellow, One Green
Row \#3: Two Yellow, Two Blue

## JUSTIFICATION = COLOR SQUARE by senw dohwsow

First, I begin with green. By looking at the first and second clue I know that if there is only one green in column A and one green in column D, I know that green will be across a row on either the top or the bottom because colors cannot be separated or diagonal There are three yellows in Column D, so we know that they all have to be connected, therefore assuming that the green row will be on either the top or bottom of the color square. I guessed and put the green on top.

At step two, I realized I was wrong and green is on the bottom. This conclusion was made after observing the third clue, "two yellow, two blue". We have yellow running down the side which accounts for one of the yellows. In this case, we need to connect a new yellow in box $3-C$ for our second yellow. This is correct because the clue told us two yellows and the puzzle shows that all the yellows are connected. However, this creates issues for the other colors, so long as green remains on top. There are two blues and in clue $\#_{1}$ we are told there are one blue and two reds. Therefore, if there are two reds and one blue in Column A, but there are two blues on the left side of row three, then green must be in the wrong placement because the red would have to be separated. I move the green into the entirety of row 4 and move one yellow from block 1-D to block 4-D.

For the last step, we first look again at clue three. If we believe our yellows are confidently placed in blocks $3-C / D$, then blue must be in both blocks $3-A / B$. If two of the blues are in box $3^{-A} / B$ then they must continue into either one or both of blocks $2-A / B$. With added information from clue 1, we know there are two reds in column $A$, so blue cannot continue into block $2-A$, because it is the only place left for red to go. If red is in blocks $1 / 2-A$, then blue must be in block $2-B$. Blue cannot continue upwards into Block $1-B$, because it would cut off red. If red cannot be cut off, then blue must be in block $2-C$. If blue is in block $2-C$, then red must be in block $1-C$. If red is in block 1-C on the last step and all the colors connect with their own type vertically or horizontally, then the puzzle is complete. Therefore, if the yellows are confidently placed in blocks $3-C D D$, then we can confidently complete our puzzle

## Crossword



## CROSSWORDJUSTIFICHPTON by benumwiw riveri

First, I began with the three letter words. I knew that they could go either one down or one across and there were two of them. What gave to a clue as to what they were was the words they connected to. In the word bank, there was only one 5-letter words and one 6-letter word. If there is only one six letter word and only one six letter box, then the word must go in the box/row. I put "first" in the across box and strike in the down column. By that I knew that "Mit" must connect the first, because it lined up with the "i". I also knew that "run" must connect with "strike" because it lined up with the "r". The last one was difficult because there were two four letter words ending in " $e$ ". What helped me get it right was the "a"s in both base and ball. The bottom across intersected with a button down column. Therefore, if the bottom across boxes intersect with the down column, then "base" must be the right answer for the across and "ball" must be the right answer for the down column because they can both intersect at their second letter "a" while the word "home" cannot. Lastly, I put home in the top across as it was the last four letter word.

## MY SOLUTIONS

## Multi step equation

$$
\begin{gathered}
2 x+5 x+5-x+6=77 \\
(2 x+5 x+-x)+(5+6)=77 \\
6 x+11=77
\end{gathered}
$$

Step 2: Subtract 11 from both sides.

$$
\begin{gathered}
6 x+11-11=77-11 \\
6 x=66
\end{gathered}
$$

Step 3: Divide both sides by 6 .

$$
6 x / 6=66 / 6
$$

$$
X=11
$$

## Logic puzzle



Bronwyn went to a fall festival on the and of October

Greg had to rake his yard on the sard of October

Arian went on a haunted hayride on the 15 th of October

Sarah went trick or treating on the 31st of October

Adan went pumpkin picking on the 1gth of October.

Color square (pg. 3)

| V/A | B | C |  |
| :--- | :--- | :--- | :--- |
| Blue | Blue | Orange | Green |
| Blue | Blue | Orange | Green |
| $\mathbf{2}$ | Orange | Orange | Green |
| $\mathbf{3}$ | Purple | Purple | Purple |

Row \#1: Two blue, One Orange, One Green
Column C: Three Orange, One Purple
Row \#z: One Purple, Two Orange, One Green
Crossword


